Section 16 Sevier River Basin FEDERAL WATER PLANNING AND DEVELOPMENT

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Section Sixteen Sevier River Basin - State Water Plan

Federal Water Planning and Development

Federal involvement at the local level is becoming more oriented towards management, conservation and preservation of natural resources with fewer programs promoting natural resources development.

16.1 INTRODUCTION

This section provides a brief description of each agency's programs and how they impact the resources of the Sevier River Basin. Although the activities of federal agencies are changing, many programs are still available to the local people for their betterment and the enhancement of their resources. This section gives an insight to the program functions and how they can be accessed. This will also help improve the working relationships between the individuals, local entities, and state and federal governments.

16.2 BACKGROUND

With the continual downsizing of the federal government in the natural resources fields, there are decreases in both financial and technical assistance in most agency programs. This process passes more responsibility to local and state governments to carry out many of these programs without providing funding. Additionally, federal standards for resources uses are higher, adding to the total cost.

16.3 FEDERAL PROGRAMS

There are 13 federal agencies with jurisdiction over programs affecting the resources of the Sevier River Basin. The agencies and their programs are briefly described below.

16.3.1 Bureau of Land Management

The Federal Land Policy and Management Act gives the Bureau of Land Management (BLM) authority to inventory and comprehensively plan for all public lands and resources under its jurisdiction. They are also responsible for managing the wilderness study areas and wild and

scenic and recreational rivers. There are no wild and scenic and recreational rivers in the Sevier River Basin.

Parts of three wilderness study areas (WSA) are in the Sevier River Basin. There is one potential study area not included in the Environmental Impact The three WSAs are all in the House Range on the western boundary of the basin and could conceivably be joined and designated as one which would increase the total acreage. These are managed for multiple use but new development is not allowed. The WSAs and their location and areas are shown in Table 16-1. The BLM also manages the Little Sahara Recreation Area located just west of U.S. Highway 6 between Eureka and Delta. See Section 3 for land areas.

Water has become a major determinant of resource management alternatives. Quality and quantity of water are major elements of resource management plans (RMP) as BLM manages riparian habitats of streams, lakes, reservoirs and ponds. After public participation, RMPs become management plans for resources on BLM lands. The Cedar, Beaver, Garfield, Antimony Resource Management Plan has been completed. Others are in the preparation process. The Bureau of Land Management is participating in a water quality study in the Sevier River Basin.

16.3.2 Bureau of Reclamation

Five categories of water resources programs are administered by the Bureau of Reclamation (BR). They are: investigation, research, loans, service and grants, all requiring close cooperation with the concerned citizens.

<u>Investigation Programs</u> - The BR conducts research on water project design, construction and materials. Research is also carried out on atmospheric management as well as geothermal and solar power. Most programs are conducted in

	Table 16-1 WILDERNESS STUDY AREAS			
WSA	Location	Area (acres)		
Rockwell ^a	T. 13 S.R. 5 W. Just west of Little Sahara Recreation Area	9,150		
Swazy Mt.	T. 15 & 16 S., R. 13 W. 40 miles NW of Delta	49,500		
Howell Pk.	T. 17 S., R. 13 W. 40 miles West of Delta	24,800		
Notch Pk.	T. 19 S., R. i3 W. 45 miles S of W of Delta	51,130		
a Rockwell WSA was not included in final EIS.				

cooperation with other entities. Currently, the BR is assisting water users along the Sevier River with real-time river and canal flow data using solar operated gages.

Research Programs - The BR conducts research on water-related design; construction; materials; atmospheric management; and wind, geothermal and solar power. Most programs are conducted in cooperation with other entities.

<u>Loan Programs</u> - BR has recently reassessed its loan programs and concluded they need major redirection. As a result, BR is no longer accepting applications for loans.

Service Programs • Service programs are designed to provide data, technical knowledge and expertise to state and local government agencies. They aim to avoid duplication of special service functions. Local governments pay for these services.

Grant Programs • The BR is involved in water management and conservation under Section 2 10, PL 97-293 (Reclamation Reform Act) and the Reclamation Act of 1902, as amended. Through a memorandum of understanding with the Utah Division of Water Resources, the BR established

cost reimbursement funds to be used for public water conservation education, training, and management plan preparation. In some cases, the Division of Water Resources is required to provide matching funds.

Expected benefits include technical assistance for willing water user groups. Classroom teachers will be trained in the use of Project WET (Water Education for Teachers) materials. Public education activities will be conducted and public information materials will be produced under the program.

16.3.3 Cooperative State Research, Education and Extension Service

This agency has responsibility for all agricultural cooperative research programs. It is also assigned all agricultural-related cooperative education and extension programs.

16.3.4 Corps of Engineers

If local entities are unable to deal with a large water resources problem, they may petition their congressional representatives for assistance from the Corps of Engineers (COE) under the Civil Works-General Investigation Authority. They may request assistance with smaller problems directly from the local COE office under the Continuing Authorities Program. This allows the

COE to investigate the economic, technical, social and environmental acceptability of environmental restoration, flood control, and streambank protection projects. When the directive covers an entire river basin, the COE studies it as a unit and prepares a comprehensive plan. Close coordination is maintained with local interests, the state and other federal agencies.

The COE also has emergency assistance authorities. Requests for emergency assistance should be made through the Utah Division of Comprehensive Emergency Management.

The Redmond Channel Improvement Project on the Sevier River near Redmond was authorized by the Corps of Engineers at the request of Sevier County in 1944 and completed in 195 1. It consisted of channel improvements and facilities to improve the river carrying capacity. The project also protects the community of Redmond and about 3,000 acres of adjacent farmland. A recent follow up study was underway to consider restoring some of the wetlands and riparian habitat. There is no current activity on the study.

Reconnaissance studies of the Sevier River and its tributaries were conducted to determine if improvements for flood control and related purposes would be economically and environmentally justified. Initially, more than 100 communities were evaluated and the most serious were evaluated in detail. Although flood threats were found to be serious, federal participation in further studies or projects was not economically justified. The study was completed in March 1994.

16.3.5 Environmental Protection Agency

Environmental Protection Agency programs include drinking water under the Safe Drinking Water Act and water pollution control under the Clean Water Act.

The Safe Drinking Water Act increased the number of regulated drinking water contaminants. It added new required treatment methods and made other revisions. The 1996 amendments to the Safe Drinking Water Act created several new programs and included a total authorization of more than \$12 billion nationwide in federal funds for various drinking water programs and

activities. Refer to Section 11, Drinking Water for more information.

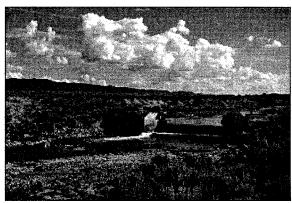
Important aspects of the Clean Water Act include the National Pollutant Discharge Elimination System (NPDES) Section 402, regulating the discharge of point sources of pollutants to waters of the United States. Construction grants originally provided funds for needed municipal wastewater treatment facilities. This was phased out in 1990 and replaced with a revolving loan fund managed by the states.

Water quality management planning and nonpoint source pollution control, Section 604(b), provides funds to states to carry out water quality management planning. Section 3 19 of the act authorizes funding for implementation of nonpoint source pollution control measures under state leadership.

16.3.6 Farm Service Agency

The Farm Service Agency (FSA) administers farm commodity, crop insurance, and conservation programs for farmers and ranchers. They also administer the farm ownership and operating loans formerly provided by the Farmers Home Administration. FSA's programs include the Agricultural Conservation Program (ACP), Emergency Conservation Program (ECP) and the Conservation Reserve Program (CRP).

The ACP is a comprehensive program designed to reduce soil erosion, mitigate water pollution, protect and improve **cropland** and pasture condition, conserve water, preserve and enhance wildlife habitat, and where possible, encourage conservation of energy. Projects are



Diversions are built with federal help

evaluated at the local level on a case-by-case basis to determine consistency with the overall ACP objectives. The ACP is administered by state and local committees that are made up of local farmers and ranchers.

The ECP provides emergency cost-share funding for various farm related disasters. These include but are not limited to excessive wind erosion, floods and extreme drought conditions. Millions of dollars were provided for farmers and ranchers during the flooding of 1983-84.

The CRP was established to encourage farmers, through contracts and annual payments, to reduce soil erosion. In addition, CRP eligibility has been expanded to promote preservation and maintenance of wetlands, wildlife habitat and water quality.

The USDA Natural Resources Conservation Service and Forest Service and the Utah Division of Forestry, Fire and State Lands provide technical program guidance. Educational support is provided by Utah State University-Cooperative Extension Service.

16.3.7 Federal Emergency Management Agency

Federal Emergency Management Agency

(FEMA) programs are directed toward disaster preparedness, assistance and mitigation. They provide technical assistance, loans and grants. Presidential Declared Disaster - After the President declares a major disaster, usually following a governor's request, grants are available to state and local governments for mitigation. FEMA provided about \$9.35 million for mitigation within the Sevier River Basin during the flooding of 1983-84. Assistance Grants - FEMA can provide matching grants to help the state develop and improve disaster preparedness plans, and develop effective state and local emergency management organizations. Also, grants are available to develop earthquake preparedness capabilities. Flood Plain Management - Technical assistance can be provided to reduce potential flood losses through flood plain management. This includes flood hazard studies to delineate flood plains, advisory services to prepare and administer flood

plain management ordinances, and assistance in enrolling in the National Flood Insurance Program. FEMA can also help with the acquisition of structures in the flood plain subjected to continual flooding.

16.3.8 Fish and Wildlife Service

The Fish and Wildlife Service (FWS) carries out mandates of the Endangered Species Act, Fish and Wildlife Coordination Act, Clean Water Act and Migratory Bird Treaty Act. There are no land or water areas in the Sevier River Basin directly managed by FWS.

The FWS compiles lists of animal and plant species native to the United States. These lists are reviewed for possible addition to the List of Endangered and Threatened Species. Candidate Species are those for which FWS has sufficient information on biological threats and vulnerability to support addition to the list. Species considered threatened or endangered in the Sevier River Basin are shown in Table 16-2. These lists change over time as species are added when they become threatened or are removed when they recover. When any activity is planned, which may affect a threatened or endangered specie, it is the responsibility of the sponsor to take actions to protect them.

Endangered Species Act Section 7 consultation is required of any federal agency to insure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat. The Fish and Wildlife Coordination Act requires consultation with the Fish and Wildlife Service and the Utah Division of Wildlife Resources where waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted or otherwise controlled or modified by any agency under a federal permit or license.

The Endangered Species Act also prohibits the "taking" of a protected species. "Take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or attempting to engage in any such conduct. This can include habitat modification or degradation where it kills or

	Table 16-2					
LISTED, PROPOSED,	THREATENED AND	ENDANGERED SPECIES				
Common Name		Scientific Name				
	Endangered Suecies					
black-footed ferret		Mustela nigripes				
least chub		Iotichthys phlegethontis ^a				
peregrine falcon		Falco peregrinus				
southwestern willow flycatcher		Empidonax traillii extimu				
autumn buttercup		Ranunculus aestivalis				
	Threatened Species					
bald eagle		Haliaeetus leucocephalus				
Mexican spotted owl		Strix occidentalis lucida				
Utah prairie dog		Cynomys parvidens				
heliotrope milkvetch		Astragalus montii				
Jones cycladenia		Cycladenia humilis va. jonesii				
last chance townsendia		Townsendia aprica				
Ute ladies'-tresses		Spiranthes diluvialis				
	Candidate Suecies					
spotted frog		Rana luteiventris				
aquarius paintbrush		Castilleja aquariensis				
a Proposed to be listed as endangered.						

injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding or sheltering. Any unpermitted activity on any land resulting in "take" of federally listed species constitutes violation of Section 9 of the Endangered Species Act. Section 404 permitting under the Clean Water Act, as administered by the Corps of Engineers, calls for FWS to respond to impacts to wetlands and on threatened or endangered species. Under the Migratory Bird Treaty Act, all birds are protected except English sparrows, starlings and pigeons.

16.3.9 Forest Service

Forest Service water-related programs include watershed management, special use authorization for water development projects, and coordination with local, state and federal agencies. There are parts of four national forests in the basin: Dixie, Fish Lake, Manti-La Sal and Uinta (See Section 3 for history and area). They also manage wilderness areas on national forest lands. There are no national forest wilderness areas in **the** Sevier River Basin. Studies are being conducted on the Fish Lake National Forest to increase runoff. See Section 10.5, Agricultural Development, for more information. The Forest Service is also participating in a water quality study in the Sevier River Basin.

<u>Watershed Management</u> • Watershed protection insures activities do not cause undue soil erosion and stream sedimentation, reduce soil productivity or otherwise degrade water quality. Water yields can be impacted as a result of snowpack changes from timber harvest procedures. Harvest procedures should use well-planned layout and

design for the best impact. Potential snowpack increases may approach one-half acre-foot per acre for some treated areas. Multiple-use considerations and specific **onsite** conditions may limit actual increases.

Special Use Authorization • Construction and operation of reservoirs, conveyance ditches, hydropower facilities and other water developments require special use authorization and an annual fee. The authorization contains conditions necessary to protect all other resources use. Coordination of water developments by others require communication early in the planning process to guarantee environmental concerns are addressed. Resource Management Plans have been prepared for all the national forests in the basin.

16.3.10 Geological Survey

The U.S. Geological Survey (USGS), through its Water Resources Division, investigates the occurrence, quantity, quality distribution and movement of surface water and groundwater. It also coordinates federal water data acquisition activities. This is accomplished through programs supported by the USGS, independent of or in cooperation with other federal or nonfederal agencies.

The USGS cost-shares with various state and local agencies. Programs include water quality and water level changes in the groundwater aquifers. They also read and evaluate surface water stream gauges. The USGS cooperative program currently maintains 13 gaging stations in the Sevier River Basin (See Figure 5-1).

16.3.11 National Park Service

The National Park Service (NPS) promotes and regulates use of national parks, monuments and similar reservations to "conserve the scenery, natural historic objects and wildlife. The NPS also provides for the enjoyment of these resources in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The long-range objectives of the NPS are as follows:

- 1. To conserve and manage the parks for their highest purpose; the natural, historical and recreational resources.
- 2. To provide the highest quality of use and enjoyment by increased millions of visitors.
- 3. To develop the parks through inclusion of additional areas of scenic, scientific, historical and recreational value.
- 4. To communicate the cultural, natural, inspirational and recreational significance of the American heritage.

In fulfillment of these objectives, NPS performs the following functions.

- Manage the 35,240 acres in **Bryce** Canyon National Park, 2 1,020 acres in the Sevier River Basin.
- Manage the 6,300 acres in Cedar Breaks National Monument, 940 acres in the Sevier River Basin.
- · Conduct the recreational aspects of water project implementation studies.
- Conducts congressionally authorized Wild and Scenic River and National Historic and Scenic Trail studies.
- Through cooperative agreements, administers recreation lands under the jurisdiction of other federal agencies.
- Provides professional and administrative support to the national, regional and park advisory boards.

16.3.12 Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) provides technical and financial assistance to conserve soil, water and related resources on non-federal land through local soil conservation districts. In addition to working with individual landowners and units of government, NRCS administers several other programs.

Soil surveys describe an area's soils, uses and management. These surveys are carried out on private, state and, by cooperative agreements, on federal lands administered by the-Bureau of Land Management. Soil surveys have been published for four areas, field mapping completed for two

areas and soil surveys are being conducted in one area. Refer to Figure 3-6.

The snow survey program provides for and coordinates snow surveys and prepares forecasts of seasonal water supplies. This is a cooperative program with state and other federal agencies for the benefit of water users. There are 13 snow courses and 14 snotel sites located throughout the Sevier River Basin. See Section 3.3.2 and Figure 3-3.

The Watershed Protection and Flood Prevention Act (PL 83-566) provides technical and financial assistance at the request of local sponsors and in cooperation with local, state and federal agencies to prevent erosion, reduce flood damages, improve irrigation systems and control water pollution. The Pleasant Creek Watershed Project at Mt. Pleasant (1958) was one of the initial eleven pilot projects approved nationally. The Mill Canyon-Sage Flat (1961) and Glenwood (1975) projects have been completed and the Monroe-Annabella Project is almost complete.

The Resource Conservation and Development (RC&D) program provides assistance to government and nonprofit organizations in multi-jurisdictional areas. Beaver, Garfield, Iron and Kane counties in the upper Sevier River Basin are located in the Color Country RC&D Project area. The project coordinator is located in Cedar City. There is a project coordinator for the Panoramaland RC&D Project (Six-County area) located in Richfield. An application is on file for project development funding.

The Emergency Watershed Program provides technical and financial assistance to agricultural oriented organizations to relieve eminent hazards to life and property. More than four million dollars were expended in the Sevier River Basin during the floods of 1983-84.

16.3.13 Rural Development

Rural Development provides financial assistance for water and waste disposal facilities in rural areas and towns of up to 10,000 people. Priority is given to public entities in areas smaller than 5,500 people to restore, improve or enlarge a water supply or waste disposal facility. Eligibility

for loans and grants requires water or waste disposal systems must be consistent with state and subdivision development plans and regulations. Rural Development also makes loans for resource conservation and development projects. Projects have been funded consisting of grants and/or loans in the towns of Circleville, Kingston, Marysvale, Centerfield, Fountain Green and Sterling.



All water based recreation is popular

16.4 FEDERAL CONCERNS

The biggest concern in natural resources planning is the lack of coordination between local, state and federal officials during the planning and implementation of various programs, activities and projects. There is a need for more coordination concerning the use of public lands.

In order to meet this need. The River Basin Coordinating Committee (RBCC) has been formed. This committee includes all federal and state resources agencies and meets quarterly to ensure projects and activities are coordinated at the technical level. Final decisions are made by the Natural Resources Coordinating Committee.